



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor  
Toni Hardesty, Director

August 12, 2005

**Certified Mail No. 7000 1670 0013 8128 9182**

Jeff Weimer  
JD Lumber Inc.  
P. O. Box 55  
Priest River, ID 83856

RE: Facility ID No. 017-00030, JD Lumber Incorporated, Priest River, Idaho  
Final PTC Permit Letter

Dear Mr. Weimer:

The Idaho Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) Number P-040123 for JD Lumber Incorporated, in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho).

This permit is based on your permit application received on November 9, 2004. This permit is effective immediately and replaces your previous permit number 017-00030, issued on February 19, 2003. This permit does not release JD Lumber Incorporated, from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

Since this project does not significantly change the terms of your permit, DEQ will not contact you regarding a meeting to discuss the terms of the permit. However, if you wish to meet to discuss the permit terms and requirements, you may contact Tom Harman of the Coeur d'Alene Regional Office to schedule a meeting. If a meeting is scheduled, DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Bill Rogers at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink, appearing to read "Martin Bauer".

Martin Bauer, Administrator  
Air Quality Division

MB/CM/sd  
Enclosures

Permit No. P-040123



**Air Quality  
PERMIT TO CONSTRUCT**

**State of Idaho  
Department of Environmental Quality**

**PERMIT No.:** P-040123

**FACILITY ID No.:** 017-00030

**AQCR:** 63

**CLASS:** SM

**SIC:** 2421

**ZONE:** 11

**UTM COORDINATE (km):** 505.5, 5336.6

**1. PERMITTEE**

J.D. Lumber, Inc.

**2. PROJECT**

Permit Modification – Throughput increase and allow for the drying of pine species

**3. MAILING ADDRESS**

P.O. Box 55

**CITY**

Priest River

**STATE**

ID

**ZIP**

83856

**4. FACILITY CONTACT**

Jeff Weimer

**TITLE**

Owner

**TELEPHONE**

(208) 448-2671

**5. RESPONSIBLE OFFICIAL**

Jeff Weimer

**TITLE**

Owner

**TELEPHONE**

(208) 448-2671

**6. EXACT PLANT LOCATION**

T56N, R5W, Section 23; one mile west of Priest River on Bodie Canyon Road.

**COUNTY**

Bonner

**7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS**

Sawmill, dimensional lumber

**8. GENERAL CONDITIONS**

This permit is issued according to IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200, et seq.

  
**TONI HARDESTY, DIRECTOR**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**DATE ISSUED:** August 12, 2005

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## Acronyms, Units, and Chemical Nomenclature

AQCR	Air Quality Control Region
Btu	British thermal unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
HAPs	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
JDL	JD Lumber
km	kilometer
lb/hr	pound per hour
m	meter(s), minute
MMBtu	million British thermal units
NO <sub>x</sub>	nitrogen oxides
PM	particulate matter
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTC	permit to construct
scf	standard cubic feet
SIC	Standard Industrial Classification
SM	synthetic minor
SO <sub>2</sub>	sulfur dioxide
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

# AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-040123

<b>Permittee:</b>	JD Lumber Incorporated	<b>Facility ID No.</b> 017-00030	<b>Date Issued:</b>	August 12, 2005
<b>Location:</b>	Priest River, Idaho			

## 1. PERMIT TO CONSTRUCT SCOPE

### *Purpose*

- 1.1 This PTC modification allows for an increase in the facility's throughput limit from 140 million to 200 million board feet per year, and allows for processing pine species up to 40 million board feet per year. In the process of modifying the PTC, the following requirements were added to assure compliance with applicable air quality standards:
- Periodic emission testing for particulate matter and carbon monoxide was added as a requirement for the boiler.
  - Periodic monitoring of boiler steam production was added as a requirement.
  - Periodic monitoring of facility visible emissions was added as a requirement.
  - Operation and Maintenance (O&M) requirements for the boiler multiclone and the planer cyclone incorporate routine maintenance and recordkeeping.
- 1.2 This PTC replaces PTC No. 017-00030 issued on February 19, 2003, the terms and conditions of which no longer apply.

### *Regulated Sources*

Table 1.1 lists all sources of regulated emissions in this PTC.

**Table 1.1 SUMMARY OF REGULATED SOURCES**

Permit Section	Source Description	Emissions Control(s)
3	<u>Boiler</u> Rated maximum Heat Input: 89.53 MMBtu/hr* Manufacturer: a combination of a Cleaver Brooks DL-60 boiler for steam generation and a Riley boiler for combustion, both sized to 50,000 lb/hr of steam. Burner type: custom/fabricated Wellons-type fuel cell Stack flow rate: 23,199 dscfm* Fuels: Bark and wood chips	<u>Multiclone</u> Manufacturer: Zurn Efficiency: 99.9% for PM**
4	<u>Kilns</u> Four Carter/Sprague kilns	None
5	<u>Planer cyclone</u> Manufacturer unknown Efficiency: 99.9% for PM**	None
6	<u>Miscellaneous</u> <ul style="list-style-type: none"> <li>• Log Debarking</li> <li>• Hog (waste size reduction) operations</li> </ul> <u>Transfer</u> <ul style="list-style-type: none"> <li>• Fuel surge bin material transfer</li> <li>• Chip bin material transfer</li> <li>• Sawdust bin material transfer</li> <li>• Hog fuel bin material transfer</li> <li>• Planer shavings material transfer</li> </ul>	None

\*Theoretical values.

\*\*As stated in PTC application 5/22/02.

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## **2. FACILITY WIDE VISIBLE EMISSIONS REQUIREMENT**

### ***Visible Emissions***

- 2.1 The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.
- 2.2 The permittee shall conduct a monthly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance to the IDEQ regional office within 24 hours. The permittee shall maintain records of the results of each visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

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**3. BOILER****3.1 Process Description**

The boiler was fabricated in a Wellons fuel cell configuration, including an economizer, by combining a Cleaver Brooks boiler steam generation system with a Riley boiler combustion chamber. The combined units were configured to produce a maximum 50,000 pounds per hour of steam. Fuel for the boiler is bark, sawdust, and wood chips. Boiler steam is used to dry lumber in four dry kilns.

**3.2 Emissions Control Description**

The boiler uses a Zurn multiclone to control particulate emissions. The boiler and multiclone emit at the boiler stack.

***Emissions Limits*****3.3 Emissions Limits**

- 3.3.1 In accordance with IDAPA 58.01.01.676, the permittee shall not discharge into the atmosphere from any fuel burning equipment with a maximum rated input of 10 million Btu's per hour or more, and commencing operation on or after October 1, 1979, particulate matter (PM) in excess of the concentrations shown in the following table:

**Table 3.1 BOILER PARTICULATE EMISSION LIMIT**

<b>Fuel Type</b>	<b>Particulate Matter (gr/dscf)</b>	<b>Emissions Oxygen</b>
Wood Product	0.080	8%

- 3.3.2 Carbon Monoxide (CO) and PM<sub>10</sub> emissions from the boiler stack shall not exceed any corresponding emissions rate limits listed in Table 3.2.

**Table 3.2 BOILER EMISSIONS LIMITS**

<b>Source description</b>	<b>PM<sub>10</sub></b>		<b>CO</b>	
	<b>lb/hr</b>	<b>T/yr</b>	<b>lb/hr</b>	<b>T/yr</b>
Boiler stack	<b>12.0</b>	<b>52.6</b>	<b>9.88</b>	<b>43.3</b>

**3.4 Opacity Limit**

Emissions from the boiler stack, or any other stack, vent, or functionally equivalent opening associated with the boiler, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

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### ***Operating Requirements***

#### **3.5 Multiclone**

The multiclone shall be operated during all periods of boiler operation.

#### **3.6 Operations and Maintenance Manual Requirements**

Within 60 days after issuance of this permit, the permittee shall have developed an O&M manual for the multiclone, which describes the procedures that will be followed to comply with General Provision 2 of this permit and the manufacturer specifications for the multiclone. This manual shall remain onsite at all times and shall be made available to DEQ representatives upon request. The O&M manual shall establish and shall provide for recordkeeping dates of routine maintenance along with operating parameter values. Operating parameter values may include, but are not limited to, optimal volumetric flow rate through the multiclone and pressure drop across the multiclone. This manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.

#### **3.7 Steam Production Limit**

Steam production is limited to a maximum of 50,000 lb/hr.

#### **3.8 Steam Production Measuring Device**

The permittee shall install, calibrate, maintain, and operate, according to manufacturer recommended specification, a steam production measuring device to continuously measure the steam production rate. The manufacturer recommended operating specifications shall remain on site at all times and shall be made available to DEQ representatives upon request.

### ***Monitoring and Recordkeeping Requirements***

#### **3.9 Steam Production**

The permittee shall monitor and record the boiler steam production rate once per hour to demonstrate compliance with Permit Condition 3.7.

#### **3.10 Compliance Test**

On or before November 7, 2008, and at least once every five years thereafter, the permittee shall conduct periodic compliance tests on the wood-fired boiler to demonstrate compliance with the PM, PM<sub>10</sub>, and CO emissions limits listed in Permit Condition 3.3. All compliance testing shall be performed in accordance with IDAPA 58.01.01.157, Permit to Construct General Provision 6, and the following:

- The test shall be conducted in accordance with the procedures outlined in the following federal regulations, or DEQ-approved alternatives:
  - Carbon Monoxide (CO): 40 CFR 60, Appendix A, Method 10
  - Particulate Matter (PM): 40 CFR 60, Appendix A, Method 5



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- PM<sub>10</sub>: Either 40 CFR 51, Appendix M, Method 201A (PM<sub>10</sub>) and 40 CFR 51, Appendix M, Method 202 (condensable particulate matter);  
or,  
40 CFR 60, Appendix A, Method 5 (PM) and 40 CFR 51, Appendix M, Method 202 (condensable particulate matter) if all 40 CFR 60, Appendix A, Method 5 particulate matter is considered PM<sub>10</sub>.
- Compliance testing shall be conducted while operations are at worst-case normal condition as defined in IDAPA 25.01.01.157.02.a.
- Visible emissions shall be observed and recorded using the methods specified in IDAPA 58.01.01.625 or 625.04 as appropriate.
- The average steam production rate shall be recorded in pounds per hour (lb/hr) during each test run.
- The pressure drop across the multiclone shall be recorded for each test run.

### ***Reporting Requirements***

#### **3.11 Compliance Test Report**

The permittee shall submit a report of the results of the compliance test required in Permit Condition 3.10, including all required process data, to the DEQ within 30 days after the date on which the test is concluded. The report shall include:

- The results of visible emissions observations during each run.
- Steam production in lb/hr during each run of the test.
- Multiclone pressure drop during each run of the test.
- PM emissions in lb/hr and gr/dscf at 8% O<sub>2</sub>; PM<sub>10</sub> emissions in lb/hr.
- Carbon Monoxide emissions in lb/hr.

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**4. DRY KILNS**

**4.1 Process Description**

Four Carter/Sprague kilns in continuous operation dry the lumber. There are no emission controls associated with the kilns.

***Emissions Limits***

**4.2 Emissions Limits**

There are no emission limits associated with the kilns.

**4.3 Opacity Limit**

Emissions from the kiln vents, or any other stack, vent, or functionally equivalent opening associated with the kilns, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

***Operating Requirements***

**4.4 Throughput Limits**

- The dried lumber throughput from the facility's dry kilns shall not exceed a maximum of 200 million board feet per any consecutive 12 month period.
- Of the maximum 200 million board feet per year, the maximum dried pine species shall not exceed 40 million board feet per any consecutive 12 month period.

**4.5 Kiln Vent Exhaust Stacks**

The permittee shall raise the existing kiln vent exhaust stacks 15 feet from their existing height.

***Monitoring and Recordkeeping Requirements***

**4.6 Lumber Production**

The permittee shall monitor and record the dried lumber throughput, including pine species, monthly and annually to demonstrate compliance with Permit Condition 4.4. Annual throughput shall be determined by summing each monthly throughput over the previous consecutive 12-month period. These records shall remain on site for the most recent five year period and shall be made available to DEQ representatives upon request.

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**5. PLANER CYCLONE**

**5.1 Process Description**

The planer sizes the dried lumber to finished dimensions. Shavings generated by the planer are collected by a pneumatic system and are transferred out of the air stream by the cyclone.

**5.2 Emissions Control Description**

There are no emission controls on the cyclone.

***Emissions Limits***

**5.3 Opacity Limit**

Emissions from the cyclone, or any other stack, vent, or functionally equivalent opening associated with the cyclone, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

***Operating Requirements***

**5.4 Cyclone**

The cyclone shall be operated during all periods of planer operation.

**5.5 Operations and Maintenance Manual Requirements**

Within 60 days issuance of this permit, the permittee shall have developed an O&M manual for the cyclone, which describes the procedures that will be followed to comply with General Provision 2 of this permit and the manufacturer specifications for the cyclone. The O&M manual shall establish and shall provide for recordkeeping dates of routine maintenance along with operating parameter values. Operating parameter values may include, but are not limited to, optimal volumetric flow rate through the cyclone and pressure drop across the cyclone. This manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.

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**6. MISCELLANEOUS SOURCES****6.1 Process Description**

Miscellaneous emissions sources at JD Lumber consist of log debarking, hog operations, and material transfer operations. Emissions from these processes are uncontrolled.

**6.2 Emissions Control Description**

Emissions from the miscellaneous emissions sources are uncontrolled.

**6.3 Opacity Limit**

Emissions from any stack, vent, or functionally equivalent opening associated with the miscellaneous sources, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

***Operating Requirements*****6.4 Fugitive Emissions**

All reasonable precautions shall be taken to minimize fugitive emissions as required by IDAPA 58.01.01.650-651.

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**7. PERMIT TO CONSTRUCT GENERAL PROVISIONS**

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.
2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:
  - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
  - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. The permittee shall notify DEQ, in writing, of the required information for the following events within five working days after occurrence:
  - Initiation of Construction - Date
  - Completion/Cessation of Construction - Date
  - Actual Production Startup - Date
  - Initial Date of Achieving Maximum Production Rate - Production Rate and Date
6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

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Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
8. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.